

REMARKS

Claims 34-44 and 53-57 are pending in this application. Claims 34-44 and 53-57 stand rejected. Reconsideration by the Examiner is respectfully requested in light of the following remarks.

Claims 34-40 and 53-57 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,092,146 to Dell et al. ("Dell"). The rejection is respectfully traversed.

Anticipation of a claim under 35 U.S.C. § 102(b) requires that the cited reference discloses every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See MPEP § 2131. Applicants respectfully submit that the cited reference does not disclose each and every element of the pending claims.

For example, claim 34 is directed to a signaling circuit for encoding presence detect data. The signaling circuit comprises a first signal encoding portion for encoding first information, said "first information being disposed in a hard-wired circuit of a semiconductor memory device." The signaling circuit also comprises a second signal encoding portion for encoding second information, said "second information being disposed in a programmable circuit of said semiconductor memory device." Applicants respectfully submit that the cited reference does not disclose presence detect data "disposed in a hard-wired circuit of a semiconductor memory device" and presence detect data "disposed in a programmable circuit of said semiconductor memory device."

Dell is directed to a memory adapter for configuring SIMMs in a computer system that normally employs DIMMs. Dell col. 1, l. 66 to col. 2, l. 2. The adapter includes a programmable logic device for interrogating and configuring serial presence detect data. Dell col. 2 ll. 2-15. The programmable logic device configures the serial

presence detect data by programming an EEPROM whose purpose is to store the serial presence detect data. Dell at col. 2, ll. 4-5 and 13-15. In fact, the primary purpose of the programmable logic device is to program the EEPROM with the serial presence detect data to allow a computer system to access the SIMMs. Dell col. 5, ll. 8-14. In Dell, the EEPROM may be programmed each time that a power-on-reset occurs. *See* Dell Figure 5. The EEPROM is programmed according to characteristic tables of the programmable logic device. Dell col. 2, ll. 11-13. Table 1 of Dell details the source for the EEPROM programming. According to Table 1, certain serial presence detect data bytes are “factory set.” This phrase does not mean, however, that the information is hard-wired into the EEPROM. On the contrary, Dell’s Figure 5 discloses that the EEPROM may be repeatedly programmed. The fact that certain bytes or information may be re-programmed without change does not teach that this information has been hard-wired into the EEPROM. By definition, an EEPROM is programmable, and information stored therein is not hard-wired. Therefore, Dell does not disclose the storage of presence detect data within a hard-wired circuit of a semiconductor memory device, as recited in claim 34.

Additionally, although the Dell logic device may read serial presence detect data from a SIMM, Dell does not disclose the further step of storing or reading information *programmed* into the SIMM component. Dell col. 5, ll. 20-25. In other words, Dell does not disclose a signaling circuit for encoding both first information “disposed in a hard-wired circuit of a semiconductor memory device” and second information “disposed in a programmable circuit of said semiconductor memory device,” as recited in claim 34.

For at least the foregoing reasons, Applicants respectfully submit that claim 34 is allowable over Dell. Claims 35-40 depend from claim 34 and are allowable along with claim 34 for at least the reasons set forth above and on their own merits.

Claim 53 recites a method of operating a memory integrated circuit. The method includes the acts of “receiving a first signal at a memory controller from said memory integrated circuit, said first signal encoding first information hardwired into said memory integrated circuit,” and “receiving a second signal at a memory controller from

said memory integrated circuit, said second signal encoding second information programmed into said memory integrated circuit” Applicants respectfully submit that Dell fails to disclose the receipt of signal encoding information hardwired into a memory integrated circuit and signal encoding information programmed into the same memory integrated circuit.

As set forth above, Dell discloses the use of a memory adapter to program serial presence detect data into an EEPROM. Dell col. 5, ll. 20-22; col. 6, table 1. Dell does not, however, disclose the receipt of signal encoding information that has been hardwired directly into the memory integrated circuit, i.e., the EEPROM. Dell also does not disclose the receipt of signal encoding information that has been programmed into the same memory integrated circuit as one that also contains hardwired signal encoding information. As such, claim 53 is allowable over Dell. Claims 54-57 depend from claim 53 and are allowable along with claim 53 for at least the reasons set forth above and on their own merits. Applicants respectfully request that the rejection be withdrawn and claims 34-40 and 53-57 be allowed.

Claims 41-44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dell. The rejection is respectfully traversed.

A prima facie case of obviousness requires that the prior art reference teaches or suggests all of the claim limitations. MPEP § 2143. Applicants respectfully submit that Dell does not teach all of the claim limitations of claims 41-44.

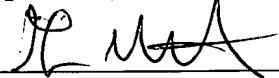
As shown above, Dell does not disclose, teach, or suggest a signaling circuit for encoding presence detect data wherein some of the presence detect data is “disposed in a hard-wired circuit of a semiconductor memory device” and some of the presence detect data is “disposed in a programmable circuit of said semiconductor memory device.” Thus, claim 41 is allowable over Dell for at least the reasons set forth above. Claims 42-44 depend from claim 41 and are allowable along with claim 41 for at least the reasons given

above and on their own merits. Applicants respectfully request that the rejection be withdrawn and claims 41-44 allowed.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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